URBAN DISTRICT OF HEANOR

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

for the year 1942

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and the

SANITARY INSPECTOR

for the years 1941 & 1942

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1942.

"I was ever of opinion, that the honest man who married, and brought up a large family, did more service than he who continued single, and only talked of population."

Oliver Goldsmith: The Vicar of Wakefield.

To: The Chairman and Members of the Heanor Urban District Council.

Gentlemen,

I have the honour to present to you the 56th Annual Report on the health of the Urban District of Heanor.

On account of the war, some details are omitted in accordance with the instructions of the Ministry. It is difficult, in such an area as this, to see the force or validity of witholding such information; but I have endeavoured to comply with the direction.

INFANTILE MORTALITY.

Last year, I had to report that this district had the lowest infantile mortality rate in the county, viz., 20.4 per 1,000 live births. The position has not been maintained. For the year ended December 31st 1942, the infantile mortality rate is 61.0 per 1,000 live births, and compares with 49 for the country. During the same period the number of still births has increased from 13 to 23; the still-birth rate of Heanor is double that of the country.

Of the 24 deaths occurring in infants under 1 year of age, 17 occurred within the first month (11 within seven days, 3 within fourteen days, and 3 at one month). Most of these neonatal deaths occurred in infants who had no chance of survival and must be classified as unavoidable, (see Table 1). Pneumonia is stated to be the cause in 6 cases of infantile death at one month, two months, four months, eight months, nine months, and eleven months. Gastro-enteritis was an associated cause in two instances. Premature birth was the cause of death in eight cases. Out of the total of 24 infantile deaths, it appears that death might have been avoided in 8 of them (3 males and 5 females); for example, the pneumonia rate suggests speculatively that sulphapyridine had not been given in adequate doses.

CAUSES OF INCREASE IN STILL-BIRTHS AND INFANTILE DEATH.

As to the causes for the increase in the number of infantile deaths and in the number of still births, it was stated in "The Times" of February 15th 1943 that -

> "Lower rates in different areas and different countries indicate that some reduction ought to be possible if the means to achieve this are understood. What a concerted campaign can do, is shown in the Chicago figures quoted by the British Paediatric Association as 37 in 1925 and 25 in 1937. But when the problem is studied closely, as in the Royal Society of Medicine discussion, it becomes clear that much is still unknown about the essential causation of still birth and neonatal death. Most experts are agreed that about half of the deaths in early life occur among the prematurely born..... but for many deaths in the first

month of life the cause is a mystery. A detailed study in Newcastle-upon-Tyne recently undertaken showed that the general practitioners just do not know why very young infants die, the experts cannot give much help and death certification in such circumstances is wholly inaccurate."

The last sentence is only partly true. I need not stress here the steps proposed, the utility of which appear to be debatable, but on them one might make this comment - agriculturists or horticulturists would be courting disaster if they bred from the poorest stock or plants. If pedigrees count for anything at all in animals and plants, they certainly do in human beings; and it must not here be pre-supposed that only those who wear starched shirt fronts possess any monoply of a good pedigree. The breeder of blood stock who selected his sires or dams at random would produce a crop of failures; so then, as long as human beings breed without selection other than their own personal inclinations, we must expect a dead level of loss or failure in the progeny which must be regarded as inevitable. It is difficult to assess the causes with precision. The actual number of live births in 1942 exceeds by 1 only those of the previous year.

A still birth is defined by The Births and Deaths Registration Act, 1926 as follows :-

" 'Still-born' and 'Still-birth' shall apply to any child which has issued forth from its mother after the twenty-eighth week of pregnancy and which did not, at any time after being completely expelled from its mother, breathe or show any other signs of life."

Births which occur prior to the twenty-eighth week are not enumerated. A very large number of miscarriages of pregnancy occur during the first three months which never come to official or professional notice. Any enquiry into the causes of still-birth or neonatal death cannot be divorced from an enquiry into the causes of miscarriages of pregnancy which are even more numerous.

One of the primary causes of still-birth and neonatal death is pre-eclamptic toxaemia associated with nephritis of pregnancy. The employment of women in industry during pregnancy may have some bearing on this factor in some cases.

Some infants give up the ghost on account of syphilitic parentage - a cause which is not so uncommon as some would believe; others come to grief on account of endocrine imbalance giving rise to ante-natal haemorrhage (e.g. insufficient corpus luteum in the maternal ovaries). In some of the States in America a Wassermann reaction is done in all expectant mothers and in Germany, a certificate of health was a pre-requisite of marriage in pre-war days. Without copying Teutonic thoroughness for detail, something

could be done in the matter of preventing the mating of unsuitable people - for example, mental defectives, epileptics and those mentally unsound, and chronic tuberculous cases.

Not all women are fitted constitutionally or temperamentally to bear children. Some, without any apparent or understood reason, develop nephritis in the second half of pregnancy; but, in this respect, it is well to bear in mind that the season of the year may play some part, as toxaemic states are more liable to appear in the months of October to March than in April to September.

The personal history is of paramount importance; a medical history of scarlet fever with or without Bright's disease, rheumatic fever, and particularly tonsillitis, may give one an indication that storms are ahead.

The loss of 6.1% of the total live births within the first year of life, 70% of which occurred within the first month of life, appears to be serious enough to warrant attention. It is clear that no amount of ante-natal supervision does anything to PREVENT the onset of pre-eclamptic toxaemia in the mother. Diet does not appear to be the sole factor in these cases; the evidence which is adduced in this respect is sometimes equivocal, for expectant mothers receive special care in this respect with priorities in milk and vitamins. The evidence for this is revealed in the quality of the infants observed at the Maternity and Child Welfare Clinic week by week. The vast majority of these are healthy, well proportioned and well nourished youngsters, most of whom have been born since the war began.

But for long milk has been considered a complete food. It is nothing of the sort. Fresh and particularly dried cows milk and human milk are deficient in constituents which are essential for the growth of a child. It has been the practice of Maternity and Child Welfare clinics to add, as a routine, to the diets of expectant and nursing mothers orange and fruit juices (Vitamin C.) and cod liver or halibut liver oils (Vitamins A and D).

If improvement is to be gained still further, it will have to become a routine practice to give additional amounts of Vitamin B1 or B complex, such as wheat germ, yeast, cereal mixture or the pure synthetic product. The vitamin content of milk has been much overrated by those who oppose boiling or pasteurising milk. McCarrison, (1921) said :-

> "Is it not common knowledge that, disregarding nature's plan, the modern tendency to rear infants artificially on boiled or pasteurised milk and proprietary foods, which are all of them vastly inferior to mother's milk in substances essential to the well-being of the child - inferior not only in vitamins, but in thyroid derivatives and other essentials ?"

But is mother's milk all that is good ? By no means so. Many infants have died in this country from beri-beri, and certified under other fancy names. It is not a disease confined to the east any more than pellagra which is now being recognised as a disease all too frequent in lunatic asylums, and which has been noted in Ireland. In 1912 Andrews made his classical experiment of feeding puppies on human mother's milk, whose infants had all died from beri-beri. All the puppies died from beri-beri.

As a further example, in the island of Nauru in Polynesia, the natives consumed large amounts of a potent intoxicating drink prepared from yeast. After the last war, the island was taken over under a mandate. The brisk and bustling League of Nations stepped in and prohibited the use of this drink. Inebriety disappeared under the direction of these wiseacres, but beri-beri broke out amongst all the breast fed infants, as with white flour and polished rice, the sole source of Vitamin B in the mothers' diets had been removed under orders. Policy had to be reversed, and the ban was lifted with the gratuitous advice that the brew was not to be made too strong. After the re-introduction of toddy drinking, the infantile beri-beri death rate fell from 70 per cent. to 7 per cent.

Beer, then, may be best after all. Established customs and habits are not always so evil as they may seem, especially as native communities are, in many respects, wiser than those who pride themselves on their standards of western civilisation.

In the U.S.A., a group of women in Detroit receiving average American diets were found to be producing milk which was so poor in Vitamin B as to warrant the suggestion that many mothers may not supply enough of the vitamin to their babies (Macy. 1927).

The introduction of national wheat meal since the war has certainly improved the Vitamin B intake in the diets of working-class people especially, and "most expert opinion now agrees that the average working-class diet in this country is so frequently low in Vitamin B1 that it would be an advantage to encourage an increased consumption of wholemeal bread." (Harris, 1938). The country referred to is Britain, and it is to be hoped that the present practice will be continued after the war. It is only in this way that the standard of life can be maintained as regards this very essential constituent.

Price in 1937 summarised the symptoms of infantile beri-beri and compared them with those of infants failing to thrive, as follows :-

Infantile Beri-beri.	Infants failing to thrive. Hypovitaminosis Bl.
Vomiting and constipation.	Vomiting and constipation.
Fretfulness.	Fretfulness.
Restlessness.	Restlessness.
Waxy look.	Pale.
Whining cry.	Cries pitifully.
Colic, "blue turns".	Colic.
Convulsions.	

The addition of as little as 3 grams of dried yeast daily to the diets of underfed women and children from economically low classes has resulted in almost all cases in weight gains, improvement in appetite and in bowel function. (Brown and his associates, quoted by Harris). It is now becoming recognised that one form of beri-beri occurs in adults in this country - the wet form, in which the patient becomes waterlogged. These cases are frequently put down to Bright's disease or heart disease with dropsy.

The question then is, why do so many modern mothers fail to feed their offspring ? Why, after an unsteady start do they dry up altogether ? Why, after conception do they cast out so frequently their immature children ? Part, if not the whole of the answer may lie in their dietetic deficiencies which indubitably exist. Among animals, instinct is a powerful protective agent against deficiency disease; it is not so in man. One cause of deficiency disease in man is the limitation in the choice of food imposed by the conditions of our civilisation (McCarrison). Pigs can do better, for when they have the opportunity, they select their food in "due proportion which are essential to their well-being and the perfection of their reproductive functions." (McCarrison).

The same author has remarked that -

"-access to abundance of food does not necessarily protect from the effects of food deficiency, since a number of factors - predjudice, penury, ignorance, habit, - often prevent the proper use and choice of health-giving foods. Who in the ranks of practising physicians is not familiar, among the well-to-do classes, with the spoilt child of pale, pasty complexion and unhealthy appetite, of sluggish bowel, and often with mucous stools or enuresis, who, deprived of the wholesome ingredients of a well-balanced natural food craves for sweetmeats, chocolates, pastries, and other dainties as devoid of natural health-giving properties as their excessive use is common ? ----- Here it is that

> overfeeding joins with underfeeding and vitamin insufficiency in swelling the C3 ranks of the nation. Or, again, who is not familiar with the overworked anaemic girl, static and with viscer-optosis, acne or seborrhoea, and oftentimes with vague psychoses, who ekes out a paltry wage for teaching, sewing or selling, satisfying the cravings of her tissues with white bread, margar-ine, and tea."

They have a saying in Belgium to-day, that to have a child is dangerous, to have two is suicidal. They know, if we do not, what starvation means.

The minimum protective dose of Vitamin B1 is certainly not the optimum dose. The physiological minimum dose is said to be 300 I.U a day and the desirable intake 600 I.U. a day. Both of these can be doubled. In pregnancy and lactation, there is a considerable increased demand for Vitamin B1 beyond these limits. The League of Nations Commission, 1935, put the re-quirements for pregnancy and lactation as low as 150-250 I.U. daily. This estimate is far too low. In a diet for toxaemia of pregnancy, Theobald put the intake at over 1,500 I.U. daily. The true optimum daily dose was put by Williams (1938) as up to 4.0 milligrammes or 1,300 I.U. daily in health - an amount which is far above the average intake in working-class families. This last figure compares with the daily intake of our ancestors who were not afflicted with proprietary breakfast foods whose number is legion. Before the war, rice was milled and polished in Burma for sale on the British market; the rice polishings which contained all of the Vitamin B were burnt as fuel to raise steam to drive the mills. The remaining polishings were imported to the U.S.A., and a concentrated extract was made from them and exported to Britain as a Vitamin B extract to supplement the deficiency in the polished rice. This is sheer insanity. If the British housewife were offered 'brown rice' in peace-time by her grocer she would have refused it with indig-nation; to-day she might be glad of it. She has entirely for-gotten the art of making frumenty, preferring the packed, ready made breakfast food. Among the working classes, cookery is a lost art except in a very few instances; the baker, the pastry cook, the cooked meat and fish shop, and the grocer have almost relieved her of the necessity of having a kitchen in her council house.

The answer to all this, the remedy for the appalling state of ignorance of sound dietetics is not, I submit, the provision of communal feeding establishments called British Restaurants, or of communal feeding of school children. Proposals are now on foot to provide three or four school meals a day for all school children. This is taking too much of the responsibility away from the parent and placing it upon the community. It is a policy of despair rather than of hope. Are we then to go one

step further and bring in State stud farms ? No, the answer lies in the education of the people how to live aright. If more time were spent in school, learning the elements of physiology and human biological processes, the art of housewifery and domestic management, the art of cookery, the principles of dietetics and food values - in short, the business of living, life at school would then prepare the youth of the nation for the life ahead, in a better fashion than it does to-day.

BIRTH AND DEATH RATES.

Both the birth and death rates have increased. The former is 17.8 and the latter is 10.28 per 1,000 of the population. The number of births has increased by 1 over that of 1941, whilst the number of deaths has increased by 11 during the same period. Whilst the birth rate of Heanor has increased from 16.8 to 17.8 and has shown a consistent rise since 1938 it is well to bear in mind the Registrar General's Statistical Review for 1938 which contains a table which shows -

> "that if 1,000 additional women were to marry at ages 22-23 in each year over a period of 10 years, the total births to be expected in the 10 years would be 11,203, or 1,120 per year."

> "On this assumption" said 'The Times' "500,000 additional early marriages in 1933-1942, if spread evenly over the period, should have resulted in 560,000 additional births. But even if we assume that 30 per cent. of the 500,000 additional young couples had one child by the end of 1942, 70 per cent. one child, and none more than one child, the number of additional births should have been 350,000. Actually there were no additional births whatsoever. It might be argued that the level of marriage which we have enjoyed for about a decade may be maintained indefinitely. But this again would be a delusion. The average number of girls born in 1927-1942 was 303,000. Of these girls about 275,000 may reach the age of 16. If they all marry at 16 there will be 275,000 brides each year. But the average number of spinsters marrying in 1933-1942 was about 355,000. This enormous number of first marriages was possible only by depleting the accumulated stock of spinsters who had reached adult age when the frequency of marriages was much smaller. This process must come to an end quite soon. It is impossible to keep the annual number of brides constantly above the level of the number of girls born 16 years earlier (minus the number of those who die in childhood). We must therefore, before long expect a considerable decline in the number of marriages. In the years preceding the war, the net reproduction rate was 0.8. In other words, the number of female births fell short by 20 per cent.

of the number which, other conditions being equal, would be required to replace in the next generation the women of reproductive age in the present generation. The yearly number of births in 1940-1942 was about the same as in 1933-39, but as mortality, even of females under 45, has increased somewhat since 1939, the net reproduction rate in 1940-42 was below 0.8. The inauguration of a population policy with the aim of raising the net reproduction rate to 1 is more necessary than ever. It would be deplorable if the rise in the number of births in 1942, welcome as it is, should create an impression that the solution of the population problem may, after all, not be so urgent. - - - The tide of reproduction, which has been receding for over 60 years, has not yet turned. It will require something more than earlier marriage and the privileges now accorded to mothers to effect so fundamental a change of heart. - - - There are many aspects of post-war plans which concern the problem. Housing policy is one. It is something more, however, than a question of the size of the house and the design of the kitchen. One factor of great importance is that of family mobility. Are parents to be tied to the same house for the best part of their lives - before they know how many children they are going to have - or will they be able to move freely from one district to another and from one sized house to another ? - - - Unless this country completely reverses its attitude to those needing rest, and turns its back on the old, this expenditure becomes inevitable with or without the Beveridge plan. The long-neglected consequences of a 60-year decline in fertility are now coming into view."

Though the rise in the birth rate for 1942 is welcome, it falls far short of the fertility rate which existed 50 years ago. In Table 2 the decline in fertility is shown very forcibly, having fallen from 44 to its present figure in the space of 50 years. All this has a bearing on the future, for we cannot ignore the claims of the unborn, and it seems dubious whether those claims will be met by devoting most of our energies to increased facilities for education up to 16 years of age and beyond, or the provision of houses. There are many plans in the air and on paper. But -

"-planning has hitherto given too little attention to a social and economic problem which is common to almost all industrialised nations - the problem of static and declining populations, of smaller families and lower reproduction rates. It cannot be pleaded that the problem is unfamiliar. - - - In almost every European State it has

been decided that the threatened decline in population must be checked, and that parents must be encouraged by social and economic privileges to have larger families. But in Britain and the Empire generally, action has been postponed. The reason for this is plain. Until a population has begun to decline it is difficult to convince the mass of men and women that there is any cause for alarm or enquiry. But once decline has begun it is too late to find any remedy which will not demand great sacrifices and drastic action by individuals and communities. The first stage in any population policy must be to discover the facts and make them known. There can be no long-range planning of any value without them. Most people will count upon the attainment of a considerable measure of reorganisation and stability within the next twenty years. But is it realised that the maximum size of the working population in 1960 is already fixed, and further, that unless prevailing habits and tendencies in family life change radically, that population is doomed to decline beyond hope of recovery ? Unless this fact and its implications have been understood, a great deal of thought about the redistribution of industry, about town planning, educational reforms and housing policy will have been misdirected or based on false assumptions. One or two figures make the matter clear. Children under 14 now constitute about 22 per cent. of the population of Britain; unless recent trends change, they will form in thirty year's time only 10.2 per cent. of the population, in sixty years only 4 per cent. The effect of such a movement on the balance of youth and age in the population can be estimated with fair accuracy. If fertility rates remain what they have been during the last ten years, the proportion of aged persons will be doubled by 1981 and the proportion of young people will have been reduced by one-third. The effect of such a change in age distribution on the cost and extent of our social services would be profound. Have the economic and financial implications been considered by those responsible for national, municipal and private finance ? - - - In England and Wales the population trebled itself between 1821 and 1921. Except in Russia, this expansive movement has been drastically curtailed in every large European country. - - - If Britain and the Dominions are to take the lead in economic reconstruction after the war their Governments must understand clearly this vital fact - that the future will not provide their economic life with the safety valve of indefinitely and rapidly expanding populations. - - - It is obviously waste of effort that discussion of family allowances, educational policy,

town planning and social services should proceed separately and independently. - - - Every year that passes makes it more difficult for any policy adopted to affect numbers in the future; and the difficulty in reversing social habits by even the most drastic measures has been made quite clear in the experience of Germany and Italy. It is often argued that parents would increase their families if they felt more confidence in the prospects offered to their children by the society of the future. They cannot be given that confidence if planning for reconstruction ignores the need to explain why and how the small family, whether regarded as a phenomenon in the realm of morals or of economics endangers the future political and economic stabilits of Britain."

As to how the "last of the few" producers would maintain in pensionable comfort and security a mighty host whose productive capacity had past the limit for more children or work is a problem of the utmost complexity. If the school leaving age goes on being continually extended it would appear inevitable that in time the working age would have to be extended equally if not more so. There could be no escape from the hard consequence that such a disturbance in the balance of a population whose coming generation was declining heavily in numbers and in its working capacity, would rebound like a boomerang upon the heads of the aged with sever impartiality.

The following causes of death show an increase over 1941:-

Influenza; measles; cancer (42 against 32 in 1941); diabetes; intracranial vascular lesions; heart disease; respiratory disease other than pneumonia; appendicitis; nephritis; premature birth (9 against 3 in 1941); congenital malformations, birth injuries and infantile diseases (15 against 5 in 1941); suicide; violent causes other than road accident.

TUBERCULOSIS.

Tuberculosis of the respiratory system (see Table 8), has caused 9 deaths which is the same number as for 1941 and non-pulmonary tuberculosis has caused no deaths as against 3 in 1941. The notifications of pulmonary tuberculosis have increased by 5, whilst the notifications of non-pulmonary tuberculosis have decreased by 3 over the previous year. The decrease in non-pulmonary tuberculosis notifications and deaths does not warrant complacency in regard to the quality of milk, for in his report for 1941, the County M.O.H., revealed that some 11 per cent. of milk samples examined in the County Laboratory were tuberculous. In my opinion, all milk should be boiled and all cream should be sterilised before being given to children. It is a very dangerous thing to be in the least bit trustful as regards milk.

"Non-pulmonary tuberculosis of bovine origin", said Sir William Savage, "seems to be dealt with in large part by burying many of the victims and treating, at huge cost, the survivors. This seems particularly the case with regard to cripples. Too often we seem content to succour this damaged traveller along life's road by tending his hurts with food and sun, and maintaining him at an inn (Hayling Island or another) until he is sufficiently recovered to hobble away, but never taking adequate measures to police the road from Jerusalem to Jericho. The Samaritan has his welcome place in the scheme, but the Preventive Force is the urgent need. There is a tendency at the present time to devote too large a share of the money available for tuberculosis to the institutional treatment and to starve the preventive side."

Those words were written in 1929. We seem to travel with exasperating slowness, for in 1943 we read that Dr. G.Gregory Kayne, Tuberculosis Officer, Middlesex County Council in the opening paper in a discussion before the Section of Comparative Medicine of the Royal Society of Medicine on February 17th 1943, said -

"There is one final point I cannot resist making. When I was consulting the Society's Proceedings I came across a discussion in 1925 on the control of tuberculosis and the milk supply. I read there the same emphatic evidence that is brought forward to-day by those who appreciate the seriousness of the problem, and, on the other hand, the same arguments against the pasteurization and boiling of milk, and the same expression of difficulties associated with eradicating the disease in cattle. It was more than disheartening to conclude that apparently little, if anything, had been done about it all since then. But I also heard one tuberculosis authority maintain, among others, that he was definitely convinced of the importance of partial immunization against pulmonary tuberculosis, as a result of the ingestion of small numbers of bovine tubercle bacilli in milk, and, moreover, that he regarded this as one of the causes underlying the favourable alteration in clinical type and in death rate from human tuberculosis noted in recent years. I do hope that, in view of the present discussions on the safety of the milk supply, this view is no longer held by any responsible member of our professions, and that such travesty of one aspect of immunity will not be allowed to hinder an effective campaign for the eradication of tuberculosis in cattle."

The tuberculosis notification rate is 0.99 per 1,000 of the population and the death rate is 0.44.

INFECTIVE HEPATITIS.

During 1942, a severe epidemic of infective hepatitis or catarrhal jaundice occurred affecting both sexes alike and all ages. It commenced early in January during the spell of severe weather and was first noticed amongst school children in Loscoe, thereafter spreading rapidly to all parts of the district. The incubation period was approximately 30 days. At the time of writing (June 1943) it is still fairly common. It has caused a considerable loss of working time in adults. The cause of the disease is unknown, though there is reason to believe that there is some connection between it and cases of jaundice caused by certain batches of measles convalescent serum, mumps convalescent plasma, and yellow fever vaccine containing serum as well as the jaundice which occasionally occurs following the intravenous injection of certain arsenical preparations. The three conditions - infective hepatitis, serum jaundice, and arsenical hepatitis are probably due to infection with one and the same virus.

Investigation was carried out in a number of local cases of infective hepatitis, all of which presented severe gastro-enteritis. No pathogenic organisms were isolated from any case. No article of food could be incriminated and examination of the water supply did not reveal anything to account for the widespread outbreak of gastro-enteritis associated with jaundice. Nevertheless, on account of the possibility of pollution of the water supply occurring at numerous points due to an abnormal amount of fractures in the mains and distributing system generally from subsidence caused by mining operations, I advised that the service reservoirs should be drained and cleansed and that following repairs to mains, these should be flushed and chlorinated. For a time, it seemed that there was a distinct lessening in the number of cases of gastro-enteritis, but as time went on, it became apparent that there was no established relationship between the two. A large proportion of the cases of gastro-enteritis showed only small traces of jaundice, and except for this were indistinguishable clinically from cases of infective enteritis. Though I was able to observe several hundreds of these cases in the course of the year, no case of subacute or acute liver atrophy arose.

MEASLES AND WHOOPING COUGH.

Measles was prevalent during the last quarter of the year. A few sporadic cases occurred in the first nine months, but on September 21st. the epidemic started in earnest. 387 cases were notified compared with 232 in 1941. The notification of measles as well as whooping-cough is utterly useless as a preventive measure. No certain prophylactic measures can be taken against measles but it is otherwise with whooping-cough. The prophylactic use of whooping-cough vaccine in adequate doses (20,000

millions in 1 cc given twice at intervals of a month with a repeat dose if the child is known to have been exposed later to infection) is well worth trying and even if the child does subsequently contract whooping-cough, the attack is usually modified. But it is difficult to appreciate the arguments which are advanced for treating developed cases of whooping-cough with vaccine as immunity does not appear until some weeks have elapsed, by which time the disease has come to an end. In this disease prevention is much better than cure, for there is nothing more distressing to a child or more disturbing to a parent's rest.

20 cases were notified during the year.

DIPHTHERIA.

The campaign against diphtheria was continued energetically during 1942. The number of children immunised was 1,791, of which number 842 were under 5 years of age and 949 were 5 years of age and under 15 years, (table 7). It was estimated that by the end of the year, 93 per cent. of the children between 5-15 years of age (95 per cent. if the evacuees were excluded) had been immunised, and of the children under 5 years of age, 62 per cent. had been immunised (80 per cent. if the children 0-1 years are excluded). As children are not immunised under 1 year of age the figure 80 per cent. represents the true state of those treated who were immunisable under the scheme. The prophylaxis of diphtheria has given very striking results and is a most beneficial measure. During 1942, six cases of diphtheria were notified with one death. All of these cases were related to the epidemic which occurred in November 1941. The last case of diphtheria was notified on February 18th 1942 and the district remained entirely free from diphtheria for the rest of the year. This freedom continued until April 6th 1943 - a period of 13½ months. This is something which the records since 1891 show has never occurred before. None of the 6 cases notified had been immunised and since the scheme was inaugurated in 1938, no case of diphtheria has arisen in any immunised child.

I feel sure, that in despite of initial difficulties at the start of the campaign, the efficacy of this method of control is now firmly established, but it is a disappointment to me to find that there are still a number of parents who are indifferent, if not actively opposed, to immunisation of their children.

In the country, the number of deaths from diphtheria in 1942 was the lowest ever recorded. We are out to prevent death particularly in the young; it is not contended that immunisation will prevent diphtheria in all instances; but it known that the chances of death among immunised children are very greatly diminished compared with those who have not been immunised - as much as 800 to 1. I am sure that if the members of the sporting fraternity could find a winner at such long odds, they would be after it like a shot.

I have previously remarked to you, gentlemen, that the price of freedom is eternal watchfulness and if we are to remain free from, and to be rid of, the terrors of this disease, the work must continue and the numbers must be kept up.

Table 6 shows the diphtheria mortality rate from 1893-1942- a period of 50 years, the case mortality being recorded as 5-year averages. There was a continued rise until the peak was reached in the period 1908-12, following which there was a continued fall until 1932. The death rate then began to rise on account of the number of cases infected with the gravis type of diphtheria bacillus, and doubled between the years 1933-42.

It is often argued that as diphtheria mortality had been falling many years, that diphtheria prophylaxis could have no effect in reducing the mortality from diphtheria. In 1938-42 there were 15 deaths and 238 cases of which 174 (13 deaths) occurred in 1938 and 1939, and for 10 years in Heanor, the case mortality had been rising. In 1938 only 2 per cent. had been immunised and by the end of 1939 only 17 per cent. had been completed. By the end of 1942 the figure had reached 95 per cent. The following short table will make the matter more clear.

	IMMUNISED.		CASES	DEATHS
YEAR	Under 5 years.	Over 5 years.		
1938	Nil	2%	134	8
1939	8%	17%	40	5
1940	12%	22%	9	0
1941	32%	57%	49*	1
1942	62%	95%	6	1
			238	15

* 27 carriers included.

Since 1891, there has never been in Heanor a period of 12 months or more totally free from diphtheria until now. In 1942, during a period of 10½ consecutive months no case was notified, and it was not until a total period of 13½ months had elapsed that the spell was broken by a local girl of 17, who had not been immunised, contracting diphtheria in an outside area. In 1941, when an epidemic commenced in November, the percentage immunised was comparatively small. Very vigorous action was taken in the last two months of that year to bring up the totals without which a very different story would have unfolded itself, for the gravis type of diphtheria bacillus was the prevailing strain in the notified cases - the most dangerous type of all.

The notification rate was four times less than that for England and Wales, and five times less than the notification rate for the 126 Great Towns.

MATERNITY SERVICES.

The shortage of midwives and of maternity beds has reached an acute stage. The Maternity Home in Mundy Street, Heanor, admitted 166 cases during the year. 71 of the admissions were outside cases, and 95 admissions were local cases. There are four midwives - 2 private and 2 County midwives who take cases on the district, not connected with the Maternity Home.

No deaths from puerperal sepsis or other maternal causes occurred during the year. Three cases of puerperal pyrexia were notified during the year compared with four notified in 1941. The notification rate was 7.21 per 1,000 total births.

Though the number of births was 393, this is far below the number born 33 years ago when 650 live births were registered. But for all that, either additional maternity beds are necessary, to deal with local or outside cases, or else neighbouring districts should provide their own accommodation.

The care of the chronic sick, the aged and infirm, presents an equally acute problem. There is often difficulty in obtaining beds in the Public Assistance Infirmaries. The lack of domestic aid, or of people to undertake any responsibility in their care on account of being engaged full time more than ever makes hospitalisation of these cases necessary. Beds are often occupied by such cases in the local hospital which deprives the more acute sick of opportunity to receive hospital treatment.

SCABIES.

The number of Scabies cases detected was 279. During June and July, I made a survey of the elementary schools and detected a large number who were in school with the disease.

There is difficulty in working the Scabies Order of 1941, owing to lack of notification being compulsory.

After trial, I am convinced that by far the most efficient method of treatment is the application of an emulsion of Benzyl Benzoate (N.W.F): but it must be applied thoroughly and more than once. Further, I am convinced that steam disinfection of the clothing, bedclothes and bedding is a necessity, especially when a whole family is infested.

Much Scabies goes undetected, and is the cause of sudden eruptions of the disease, e.g., at one school an outbreak occurred when on examination, more than 50 per cent. of the children were found to be infested.

UNDULANT FEVER.

One case of this disease was discovered in an adult male. The infection was traced to the milk supply. The patient's serum agglutinated Brucella abortus and the organisms were

isolated from the milk on culture. The facts of the case were reported to the County M.O.H. and to the Ministry.

It is certain that many cases of abortus fever in humans go unrecognised. It is only by a widal test that they can be differentiated with certainity, for they have a close resemblance, in my experience to Paratyphoid Fever. Severe joint and back pains with fever may cause it to be confused with a rheumatic infection.

CEREBRO-SPINAL FEVER.

2 cases were notified compared with 7 cases during 1941. The cases were removed to the Derby Borough Isolation hospital. Both recovered.

In conclusion, I wish to extend my appreciation of the valuable services rendered by your Sanitary Inspector, Mr. A.A. Wilson, who returned to duty after an absence on war service for over two years.

It is sometimes refreshing gentlemen, to turn to the east and its ways, or at least those parts where the hand of western civilisation has, as yet, not grasped it. Kingdon Ward in his book "Assam Adventure" said of the Jongpen (i.e., the chief magistrate) at Dirang Dzong on the borders of Tibet "He did nothing, and did it very well. It was pleasant to see how Monyul ran itself. I could imagine it being run by a British official - the files full of reports, returns, assessments, settlements, cases, all that ranting, roaring, clanking machinery of government. The fact is we get a great deal too much government in the west. The secret of good government is probably to let people alone, and they will learn to govern themselves."

I have the honour to be, gentlemen,

Your obedient servant,

Philip H. J. Turton,

Medical Officer of Health.

TABLE 1.

CAUSES OF INFANTILE DEATHS.

NO.	SEX.	AGE.	DISEASES CAUSING DEATH.
1	M	4 hours.	Premature Birth. 7 months.
2	F	5 hours.	Atelectasis of lungs:pleural effusion.P.M.
3	M	10 hours.	Premature Birth.
4	F	22 hours.	Icterus neonatorum: Maternal eclampsia.
5	F	1 day.	Premature Birth: Maternal toxaemia.
6	M	1 day.	Patent foramen ovale. P.M.
7	F	2 days.	Premature Birth, 7 months.
8	M	3 days.	Haemorrhagic disease of new born: premature Birth.
9	F	4 days.	Icterus neonatorum.
10	M	4 days.	Premature Birth: Icterus neonatorum.
11	M	5 days.	Premature Birth: Icterus neonatorum.
12	F	2 weeks.	Spina bifida.
13	F	2 weeks.	Premature Birth.
14	M	2 weeks.	Premature Birth.
15	F	1 month.	Congestion of lungs. P.M.
16	M	1 month.	Acute Pulmonary oedema.
17	F	1 month.	Congenital defect of diaphragm. P.M.
18	M	2 months.	Meningitis: Spina bifida.
19	F	2 months.	Broncho-pneumonia.
20	M	4 months.	Broncho-pneumonia.
21	M	7 months.	Enteritis: hare lip and cleft palate.
22	F	8 months.	Broncho-pneumonia: Gastro-enteritis.
23	F	9 months.	Pneumonia.
24	F	11 months.	Pulmonary oedema; Gastro-enteritis

TABLE 2.

BIRTH AND DEATH RATES FOR HEANOR - 1890-1942.

YEAR.	BIRTH-RATE.	DEATH-RATE.
1890	38.3	16.6
1	44.2	17.5
2	38.5	22.6
3	44.2	14.2
4	42.6	13.8
5	41.0	14.5
6	41.6	21.2
7	39.9	17.2
8	36.8	16.0
9	37.4	15.4
1900	37.3	18.8
1	36.7	15.3
2	35.4	12.9
3	37.5	13.8
4	39.0	15.5
5	34.5	13.2

HEANOR AND CODNOR.

YEAR.	NO. OF BIRTHS.	BIRTH-RATE.	DEATH-RATE.	NO. OF DEATHS.
1906	592	32.4	11.9	219
7	598	32.1	11.8	221
8	644	33.8	12.4	237
9	650	33.4	11.4	223
1910	591	29.8	12.3	245
1	554	27.8	10.7	214
2	612	30.0	10.3	207
3	536	25.98	12.45	257
4	583	27.81	11.97	251
5	556	26.58	11.23	235
6	571	25.75	11.24	229
7	487	21.75	11.00	221
8	474	21.69	16.25	317
9	457	21.01	12.64	264
1920	585	26.94	9.81	213
1	538	24.60	10.06	220
2	475	21.56	10.71	236
3	442	19.91	9.91	220
4	448	20.15	8.81	196
5	447	19.95	10.8	242
6	411	18.96	11.35	246
7	361	16.59	11.21	244
8	394	17.3	9.13	208
9	374	16.23	10.2	235

TABLE 2. (Ctd.)

YEAR.	NO. OF BIRTHS.	BIRTH-RATE.	DEATH-RATE.	NO. OF DEATHS.
1930	418	18.13	9.63	222
1	389	17.2	10.5	238
2	390	17.3	10.2	230
3	344	15.2	10.2	225
4	336	14.89	9.5	216
5	351	15.5	9.8	222
6	387	17.15	9.25	209
7	369	16.3	11.5	260
8	361	15.9	10.1	230
9	370	16.2	11.2	255
1940	372	16.7	11.8	265
1	392	16.8	9.5	216
2	393	17.8	10.2	227

TABLE 3.

VARIOUS CAUSES OF DEATH IN 1942.

		M	F
Typhoid and Paratyphoid	0	0	0
Cerebro-spinal Fever.	0	0	0
Scarlet Fever..	0	0	0
Whooping Cough.	0	0	0
Diphtheria	1	1	0
Tuberculosis of Respiratory System	9	5	4
Other forms of Tuberculosis	0	0	0
Syphilis.	2	2	0
Influenza	0	0	0
Measles..	1	1	0
Acute Poliomyelitis and Polioencephalitis	0	0	0
Acute Encephalitis...	0	0	0
Cancer: Oesophagus and Buccal Cavity...	2	2	0
" Uterus.	5	0	5
" Stomach and Duodenum	9	4	5
" Breast.	6	0	6
" All other sites	20	14	6
Diabetes.	3	0	3
Intracranial Vascular Lesions	26	13	13
Heart Disease..	49	24	25
Other Diseases of Circulatory System...	5	1	4
Bronchitis	10	4	6
Pneumonia	9	4	5
Other Respiratory Disease..	3	1	2
Ulcer of Stomach and Duodenum	2	2	0
Diarrhoea under 2 years	3	1	2
Appendicitis..	1	1	0
Other Digestive Disease	7	3	4
Nephritis	8	4	4
Puerperal Sepsis	0	0	0
Other Maternal Causes	0	0	0
Premature Birth	8	6	2
Congenital Malformations, Birth Injuries or Infantile Diseases	8	3	5
Suicide..	2	1	1
Road Traffic Accidents	2	2	0
Other Violent Causes.	7	6	1
All Other Causes	19	8	11
Total.....	227	113	114

TABLE 4.

INFECTIOUS DISEASES: CASES NOTIFIED DURING 1942.

DISEASE.	CASE RATE PER 1,000	NUMBER OF CASES NOTIFIED.	NUMBER OF CASES REMOVED TO HOSPITAL.
Tuberculosis - Pulmonary.	0.99	14	10
Tuberculosis Other Forms.		8	6
Smallpox.	Nil	0	0
Scarlet Fever.	2.21	49	19
Diphtheria.	0.27	6	4
Enteric (Typhoid) Fever	Nil	0	0
Puerperal Pyrexia (7.21 per 1,000 Total Births)	0.13	3	3
Cerebro-spinal Fever.	0.04	1	1
Erysipelas.	0.86	19	0
Ophthalmia Neonatorum.	0.09	2	0
Encephalitis Lethargica.	Nil	0	0
Acute Poliomyelitis.	0.04	1	1
Pneumonia.	2.53	56	20
Measles.	17.52	387	0
Whooping Cough.	0.99	20	0
Undulant Fever.	0.04	1	0
Bacillary Dysentery.	0.18	4	0

TABLE 5.

CASES OF NOTIFIABLE DISEASES AT VARYING AGES DURING 1942.

AGE GROUPS.

DISEASE.	Under 1 year.	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	60-	TOTAL.
Smallpox.	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet Fever.	1	3	3	6	2	25	4	3	2	0	0	0	49
Diphtheria.	0	0	2	0	0	3	1	0	0	0	0	0	6
Enteric Fever(including Para-typhoid).	0	0	0	0	0	0	0	0	0	0	0	0	0
Puerperal Pyrexia.	0	0	0	0	0	0	0	0	1	2	0	0	3
Pneumonia.	4	4	0	1	3	9	3	1	5	6	13	7	56
Measles.	20	34	40	53	58	165	12	2	2	1	0	0	387
Whooping Cough.	2	3	3	4	3	4	0	1	0	0	0	0	20
Bacillary Dysentery.	0	0	0	0	0	1	1	0	1	0	0	1	4
Ophthalmia Neonatorum.	2	0	0	0	0	0	0	0	0	0	0	0	2
Erysipelas.	0	0	0	0	0	0	0	0	3	3	9	4	19
Undulant Fever.	0	0	0	0	0	0	0	0	0	1	0	0	1
Cerebro-spinal Fever.	0	0	0	0	0	1	0	0	0	0	0	0	1
Acute Poliomyelitis.	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL.	29	44	48	64	66	208	22	7	14	13	22	12	549

TABLE 6.

DIPHTHERIA MORTALITY HEANOR URBAN DISTRICT FOR 50 YEARS 1893-1942.

YEAR.	CASE MORTALITY PER CENT.
1893-1897	6.4
1898-1902	6.9
1903-1907	9.2
1908-1912	13.1
1913-1917	6.6
1918-1922	6.1
1923-1927	5.4
1928-1932	2.5
1933-1937	3.2
1938-1942	6.3

TABLE 7.

DIPHTHERIA IMMUNISATION, NOTIFICATIONS, AND DEATHS FOR THE YEARS 1938 TO 1942 INCLUSIVE.

Year.	Pre-School Age 1-5 years.	School Age 5-15 years	Total for year.
IMMUNISATION.			
1938	0	102	102
1939	138	602	740
1940	74	295	369
1941	317	1,456	1,773
1942	842	949	1,791
TOTAL -	1,371	3,404	4,775

NOTIFICATIONS.	No. Notified.	Deaths.
1938	134	8
1939	40	5
1940	9	0
1941	49*	1
1942	6	1
TOTAL -	238	15

* Includes 27 carriers.

TABLE 8.

TUBERCULOSIS.

AGE PERIODS.	NEW CASES NOTIFIED.				DEATHS.			
	PULMONARY		NON-PULMONARY		PULMONARY		NON-PULMONARY	
	M	F	M	F	M	F	M	F
Under 1	-	-	-	-	-	-	-	-
1-5	1	-	2	-	-	-	-	-
5-15	2	1	1	2	-	1	-	-
15-25	2	2	-	1	-	2	-	-
25-35	2	-	1	1	1	1	-	-
35-45	2	-	-	-	3	-	-	-
45-55	1	-	-	-	1	-	-	-
55-65	1	-	-	-	-	-	-	-
Over 65.	-	-	-	-	-	-	-	-
TOTAL -	11	3	4	4	5	4	-	-

TABLE 9.

BIRTH-RATES, CIVILIAN DEATH RATES, ANALYSIS OF MORTALITY, MATERNAL MORTALITY AND CASE-RATES FOR CERTAIN INFECTIOUS DISEASES IN THE YEAR 1942.

	HEANOR U.D.	England and Wales.	126 C Bs. and Great Towns including London.	148 Smaller Towns resident Population of 25,000-50,000 at 1931 Census.
	Rates per 1,000 Civilian Population.			
Live Births.	17.8	15.8	17.3	18.4
Still Births.	1.04	0.54	0.66	0.62
Deaths :-				
All causes	10.28	11.6	13.3	12.1
Typhoid and Paratyphoid)	Nil	0.00	0.00	0.00
Scarlet Fever.	0.00	0.00	0.00	0.00
Whooping Cough.	Nil	0.02	0.03	0.02
Influenza.	Nil	0.09	0.09	0.10
Diphtheria.	0.04	0.05	0.06	0.04
Small Pox.	Nil	Nil	Nil	Nil
Measles.	0.04	0.01	0.02	0.01

Ctd..

TABLE 9 Ctd.

	HEANOR U.D.	England and Wales.	126 C Bs. and Great Towns including London.	148 Smaller Towns resident Population of 25,000-50,000 at 1931 Census.
	Rates per 1,000 Live Births.			
Deaths under 1 year of age.	61.0	49	59	46
Deaths from Diarrhoea and Enteritis under 2 years of age.	Nil	5.2	7.5	4.8
	Rates per 1,000 Civilian Population.			
Notifications :-				
Typhoid Fever.	Nil	0.01	0.01	0.01
Paratyphoid Fever.	Nil	0.01	0.01	0.01
Cerebro-Spinal Fever.	0.04	0.14	0.17	0.12
Scarlet Fever.	2.21	2.19	2.49	2.34
Whooping Cough.	0.99	1.73	1.97	1.58
Diphtheria.	0.27	1.05	1.35	0.91
Erysipelas.	0.86	0.30	0.36	0.26
Small Pox.	Nil	0.00	0.00	Nil
Measles.	17.52	7.46	9.27	7.39
Pneumonia.	2.53	1.07	1.30	0.94
	Rates per 1,000 Total Births.(Live and Still)			
Maternal Mortality:-(Excluding Abortion).				
Puerperal Infection.	Nil	0.42	Not available.	
Others.	Nil	1.59	"	"
Total.	Nil	2.01	"	"
Notifications:-				
Puerperal Fever.) Puerperal Pyrexia.)	7.21	12.61	15.94	10.80

REPORT OF THE SANITARY INSPECTOR FOR THE HEANOR URBAN DISTRICT. FOR THE YEARS 1941 AND 1942.

---ooOoo---

To the Chairman and Members of the

Heanor Urban District Council.

Gentlemen,

This Report covers the two years 1941 and 1942, and as your Sanitary Inspector was provisionally released from Military Service in October 1942 after serving from 1st July 1940, the inspections represent work carried out by Mr. C. Bassford who acted in my absence.

In the interval between the last and the present conflict, notable results were achieved in the sphere of health services in this area, and whilst much was accomplished, it was with no feeling of complacency that such progress was regarded, the consensus of opinion being that we were just over the threshold of our aims and intentions.

It would therefore appear to be necessary to keep vital and active those institutions which served so well in the past and which proved flexible instruments in securing ordered unceasing changes and progress.

At present, Slum Clearance and the Abatement of Overcrowding are at a standstill, Smoke Abatement is officially in the background, the ensuring of clean food and a clean and safe Milk Supply demand much time and thought, whilst the Cleansing Service is an essential national work, and treasure is extracted from the dustbin. There is also a fair amount of remedial work to be undertaken.

VISITS AND INSPECTIONS MADE, 1941 & 1942.

	1941.	1942.
Visits and Inspections made :-	3990	3850
Appointments with Owners, Agents and Builders ...	256	213
Premises Inspected on Complaint..	203	190
Premises Re-visited following Complaint	116	93
Cinemas and Theatres.	21	32
Drainage Inspections.	43	36
Smoke, Colour and Water Tests to Drains	11	12
Factories	18	30
Workplaces	27	6
Outworkers' Premises.	5	14
Offensive Trades	25	28
Infectious Disease and Disinfection	875	896
Piggeries	30	22
Rats and Mice Destruction Act	26	29
Refuse Receptacles and Conveniences	770	861
Refuse Tips	299	253
Re-visits to property under notice	301	181
Schools, Churches and Chapels	4	4
Smoke Observations and Visits	2	Nil
Stables..	4	2
Miscellaneous Visits and Salvage.	175	284
Housing Enquiries re Application for Council Houses	39	36
Houses Inspected re Overcrowding.	2	3
Houses Inspected re Housing Defects :		
Public Health Acts. 49. Housing Acts. 15 ...	64	-
" " " 77. " " 15 ...	-	92
Number of Inspections made for the purpose... ...	80	96
Meat and Other Foods Inspections :-		
Slaughter-houses	241	136
Butchers' Shops	86	67
Food Stalls and Vehicles...	45	28
Bakehouses	24	15
Other Food Preparing Premises	60	60
Fish Frying Premises.	53	47
Cowsheds, Milk Purveyors Premises and Vehicles ...	77	84

	1941	1942
Complaints :-		
No. of Complaints received.	115	254
No. referred to other Departments	10	12
Summary of Complaints :-		
Defective closet accommodation..	15	12
Dirty Houses..	3	2
Housing Defects	25	23
Miscellaneous Nuisances, and Dustbins. ...	20	177
Obstructed Drains or Sewers	25	6
Prevalence of Rats..	4	6
Verminous Houses	13	16
	105	242
Notices issued :-		
No. of Informal Notices Served...	105	254
No. of Statutory Notices Served..	2	Nil
No. of Nuisances Abated	361	479
No. of Notices to Day Schools, Sunday Schools and Librarians re Infectious Disease.	139	136

SANITARY IMPROVEMENTS MADE AND DEFECTS REMEDIED DURING THE TWO YEARS UNDER THE PUBLIC HEALTH ACTS AND HOUSING ACTS.

INTERIOR OF HOUSES :-		
Houses cleansed..	3	4
Floors re-laid or repaired...	7	9
Windows repaired or provided with Sashcords ...	11	2
Walls repaired	2	3
Ceilings repaired	5	5
Staircases repaired	1	Nil
Fireplaces or Ovens repaired.	4	2
Doors repaired...	3	1
Water removed from cellars...	Nil	1
Washing coppers provided and repaired	3	4
Baths, Lavatory Basins, etc :-		
New sinks provided	5	2
Sink waste-pipes trapped or repaired	4	2
Bath waste-pipes trapped or repaired	1	1
Water Supply :-		
Internal supply of water provided (Taps fixed over sinks)..	1	Nil
Overcrowding :-		
Overcrowding remedied..	1	1

	1941	1942
EXTERIOR OF HOUSES :-		
Roofs repaired or renewed	14	12
Walls pointed or repaired	6	3
Chimney stacks repaired	3	2
Eaves and downspouts provided or repaired ...	19	17
Dampness remedied	Nil	1
Drainage :-		
Drains opened and cleansed...	45	60
Drains re-laid or repaired...	9	6
Additional drains provided...	Nil	1
New Inspection Chambers provided...	Nil	2
Inspection Chambers repaired.	1	1
New gully traps provided	Nil	2
Drains tested with smoke, water or colour fluid	9	8
Water removed from cellars...	Nil	1
Yards and Outbuildings :-		
Coalhouses built or repaired.	Nil	1
Yards paved or repaired	Nil	1
Yard surfaces cleansed.	3	4
Privies, Pail Closets, Cesspools and W.C's :-		
Pan closets receptacles renewed	6	7
New W.C. buildings erected...	Nil	3
Water closets accommodation repaired	4	Nil
Water closets provided with new pedestals ...	2	2
Defective water service repaired...	16	15
Defective flushing apparatus repaired or renewed	1	2
Additional W.C's provided	Nil	2
Sanitary conveniences limewashed...	Nil	5
Insufficient sanitary accommodation remedied...	Nil	1
W.C's cleansed...	Nil	1
Ashpits and Dustbins :-		
Privy ashpits abolished	Nil	3
Dustbins provided in lieu of ashpits	Nil	3
Dustbins provided (replacements)...	240	280

SUMMARY OF REGISTERED PREMISES.

	1941	1942
Slaughter-houses - Licensed 19. Registered 3. ... (Not in use)	22	22
Offensive Trade Premises...	3	3
Workplaces	17	17
Outworkers' Premises.	2	14
Factories	93	93
Bakehouses	12	12
Fish Frying Premises.	35	35
Other Food Preparing Premises	20	20
Farms or other Premises used as Dairies	35	35
Cowsheds.	76	76
Milk Purveyors Retail 28, Wholesale 30.	58	58
Milk Purveyors who reside outside but retail within this area	14	14

HOUSING

During the two years five houses were demolished and no new houses were built. Some progress has been made with limited works of repair, a fair amount of urgent and necessary repairs are insisted upon. There has been however, a curtailment of repairs and maintenance which has aggravated the situation.

It is to be hoped that the time is not far distant when we shall again be fully engaged in the humanitarian task of remedying the present housing situation, as the urgent demands for housing accommodation will be intensified at the end of the war.

It can be claimed with justice and pride that in the few years prior to the present war a considerable advance was made in the two fundamentals of healthy housing - the provision of sufficient houses and the eradication of bad ones - but this excellent effort was brought to an abrupt halt, with the result that we have been deprived of any addition to our housing resources. Acquiescence and tolerance of unfit houses saps vitality, leads to ill health, and is no incentive to good citizenship.

COMMON LODGING HOUSES.

There are no Common Lodging Houses in the area.

OUTWORKERS.

There were 14 premises in use for this purpose at the end of 1942. Lists containing the names and addresses of Outworkers were received as usual, and particulars relating to those employed outside this area were forwarded to the Local Authorities concerned.

The Home Work carried out was as follows :-

Nature of Work.	Premises.	No. of Outworkers. Males.	Females.
Hosiery	14	-	14

Inspection of these premises revealed no unsatisfactory conditions.

INFECTIOUS DISEASE AND DISINFECTION

The following work has been carried out :-

	1941	1942
No. of visits paid to infected houses..	875	896
No. of visits to contacts with Infectious Disease..	24	43
No. of rooms disinfected (Houses and Schools) ...	660	654
No. of Notices to Day Schools	67	64
No. of Notices to Sunday Schools.	22	26
No. of Notices to Librarians	50	46
No. of lots of bedding destroyed upon request ...	13	9
No. of Verminous Houses disinfested	11	14
No. of Library Books disinfected	138	141
No. of Library Books destroyed...	Nil	Nil

The disinfection of premises, clothing, books etc, was carried out in accordance with usual practice, and the disinfection of Elementary Schools has been discontinued without in any way effecting the scholars or schools concerned.

DISINFESTATION.

	1941	1942
No. of Houses infested	16	13
(a) Council Houses	3	2
(b) Other Houses	13	11
No. of Houses disinfested..	16	13

Considerable time has recently been devoted to cases of Scabies, and also the disinfestation of houses infested with bed bugs. In the latter cases heavy concentration of S.02 is used, together with spraying with Zaldecide or Vermicine.

ATMOSPHERIC POLLUTION AND SMOKE ABATEMENT

There appears little to record of direct smoke abatement. The suspension of legislation and the encouragement for security purposes of smoke production renders it apparent that much valuable ground will have to be made up later. The intensive publicity campaign for fuel economy however is of particular interest to those concerned with the problem of air pollution. We may eventually see evolved the scientific development and the efficient use of our fuel resources in a way that will ultimately lead to the ending of the smoke problem of the future and which will affect not only the post war years, but the more distant industrial well-being of the nation.

SANITARY ACCOMMODATION

There has been little change since the outbreak of War. The number and type in use in the area at the end of 1942 were as follows :-

	Heanor Ward.	Langley Mill Ward.	Langley & Marlpool Wards.	Loscoe, Codnor, etc. Wards.	Totals.
Water Closets	2574	1461	1239	1773	7047
Pail Closets	3	1	5	44	53
Privy Middens	2	Nil	3	35	43
Dry Ashpits	3	1	Nil	2	6
Dustbins	2449	1335	1207	1687	6678

The number of dustbins include a number of bins which are used in connection with business premises for trade refuse purposes. The number of water closets include houses and other premises where more than one W.C. is installed. The remaining pails and privy middens are chiefly situated in unsewered parts of the area.

ASHPITS.

The number of dry ashpits at present in the area is as follows :-

Heanor.	Langley Mill.	Langley & Marlpool.	Loscoe & Codnor.	Total.
3	1	Nil	2	6

SUMMARY OF PRIVY MIDDENS REMAINING
(December, 1942).

Dwelling-houses served with privy-middens	40
Factories, Churches, Chapels and Schools	Nil
Total -	40

SUMMARY OF PAIL CLOSETS REMAINING.
(December, 1942).

Dwelling-houses served with pail closets	52
Church	1
Factories, Chapels and Schools...	Nil
Total -	53

PUBLIC CLEANSING SERVICE

Refuse Collection :- Every endeavour has been made to enable this service to function effectively. A re-arrangement has been made involving dividing the district into three distinct areas for collection, disposal and salvaging purposes, each area having a vehicle and loaders, with a conveniently situated refuse tip and salvage collection depot. Shortage of labour has proved problematical, and whilst this may be philosphically regarded as one of the sacrifices that has to be made in the national interest, it is nevertheless difficult to maintain the former standard with those who have not the necessary physical stamina, but whose work on the whole is reasonably well performed. Higher priority national service claims, and unavoidable illness involve changes, but in these times everyone is urged to give of his best even at the expense of a little inconvenience. Being a mining area the refuse yield is high.

Refuse Disposal :- Although waste collection and reclamation overshadow refuse disposal, the latter cannot be ignored, and controlled tipping is the practice as formerly. Those engaged upon refuse tips have taken an intelligent interest in their work, and much land is being reclaimed.

Salvaging :- This service is grafted on to refuse collection, and each vehicle is provided with a trailer for the collection of salvaged materials. In addition, special collections are made weekly. Collection depots are in use, and all materials excepting iron are now sorted and baled under cover at Depots. A Kitchen Waste collection scheme has been brought into operation during the current year (1943).

NET COST OF REFUSE COLLECTION & DISPOSAL FOR PAST 5 YEARS

Refuse removed 1941.

11,319	Tons Day Refuse
252	Tons Night Soil
11,571	(Estimated Weight)

	£.	s.	d.		Cost per house per annum.
1938 ...	3674	0	0	.....	11/6
1939 ...	3586	0	0	.....	11/-
1940 ...	4175	0	0	.....	13/-
1941 ...	4315	0	0	.....	13/5
1942 ...	4747	0	0	.....	14/9

Refuse removed 1942.

11,425	Tons Day Refuse.
231	Tons Night Soil.
11,656	(Estimated Weight).

TABLE OF COSTS FOR THE YEARS 1941 AND 1942

(1941)

Item. (1) (2)	I. Collection. Including Depreciation or Loan Charges (3)		I. Collection. Excluding Depreciation or Loan Charges (4)		II. Disposal. Including Depreciation or Loan Charges (5)		II. Disposal. Excluding Depreciation or Loan Charges (6)		Total. Including Depreciation or Loan Charges (7)		Total. Excluding Depreciation or Loan Charges (8)	
Revenue A/c.	Day Refuse	Night Soil	Day £	Night £	Day £	Night £	Day £	Night £	Day £	Night £	Day £	Night £
A. Gross Exp.	3642	174	3642	174	991	20	960	20	4633	194	4602	194
B. Gross Income.	481	-	481	-	-	-	-	-	481	-	481	-
C. Net Cost.	3161	174	3161	174	991	20	960	20	4152	194	4121	194

The Income from Salvaged materials was £ 463.

(1942)

Revenue A/c.	Day Refuse	Night Soil	Day £	Night £	Day £	Night £	Day £	Night £	Day £	Night £	Day £	Night £
A. Gross Exp.	4480	193	4480	193	1260	20	1229	20	5740	213	5709	213
B. Gross Income.	1175	-	1175	-	-	-	-	-	1175	-	1175	-
C. Net Cost.	3305	193	3305	193	1260	20	1229	20	4565	213	4534	213

The Income from Salvaged materials was £ 1028

PUBLIC CONVENIENCES

There are four of these buildings owned and maintained by the Council, two of which require replacement. The receipts from automatic locks in 1942 was £42.10.0d.

SANITARY CONDITION OF MUSIC HALLS, THEATRES ETC.

These premises it is understood called for no action.

TENTS, VANS AND TEMPORARY STRUCTURES.

No structures of this description are occupied for human habitation within this district, and no licences under Section 269 of the Public Health Act 1936 are in operation. Vigilance is necessary on certain occasions to prevent the establishment of caravans.

RATS & MICE (DESTRUCTION) ACTS.

Rat Catchers periodically deal with refuse tips, sewage works, depots, allotments, brook-courses and land owned by this Council, whilst advice and every assistance is given to occupiers of domestic and business premises where necessary. The criterion by which measures for rat clearance are judged, as being effective and that the expenditure has been justified, lies in the absence of rat infestation and not so much the actual number of rats destroyed. It is not always the production of corpses in sufficient numbers which imply good work, because the fewer the rodents in proportion to the extent of the available harbourage, the more difficult are they to detect and destroy. Sustained vigilance is a guarantee against infestation. There is no record of the actual number of rats destroyed.

INSPECTION AND SUPERVISION OF FOOD

Meat and other Foodstuffs surrendered and destroyed :-

	1941		1942	
Meat	272	lbs.	456	lbs.
Tinned Foods...	206	Tins.	751	Tins
Butter...	8½	lbs.	33	lbs.
Eggs	108	doz.	81	doz.
Fish	70	lbs.	294	lbs.
Cheese...	-		48	lbs.
Vegetables	-		10½	cwts.

OFFENSIVE TRADES

The three offensive trades have as usual been conducted satisfactorily, and have given no cause for complaint.

FOOD PREPARING PREMISES

Premises of this description including Bakehouses, Fish and Chip Frying, the preparation or manufacture of sausages, pies, pressed, pickled or preserved food etc., have apparently called for little action.

COWSHEDS, DAIRIES AND MILKSHOPS

Milk is one of the most important articles of our dietary but unlike many of our common food-stuffs it is an excellent medium for the growth of bacteria.

Three methods of rendering milk safe are :- (a) eradication of cattle disease, (b) control of the human personnel, and (c) destruction of pathogenic organisms by heat treatment of the milk itself.

There is full co-operation between the War Agricultural Executive Committee and this Council, and visits are paid to producers' and retailers' premises with a view to improving where necessary the methods employed in milk production and distribution .

HEALTH EDUCATION

The Empire Marketing Boards continue to serve a useful purpose, posters being provided at regular intervals by the Health & Cleanliness Council. Useful Bulletins and Leaflets on Health Education are also obtained and distributed periodically.

In concluding this report which is considerably abbreviated, my thanks are due to the Council for the interest and support always displayed towards the Public Health Services, to Mr. Bassford and Miss Annable for the work accomplished, to all the Officials of the Council for their cordial co-operation, and finally, to the workmen engaged on the Cleansing Service for maintaining a service which involves much work of a particularly arduous description.

I am, Gentlemen,

Your obedient Servant,

Andrew A. Wilson.